

The embodiments of the invention in which an exclusive property or privilege is claimed are defined as follows:

1. A method of forming a HSQFN (High Stand-off Quad Flat Non-leaded) package, comprising:

providing a leadframe with bonding pads and die pads for receiving a die;

attaching a die on said die pad;

bonding wires between said bonding pads and said die for electrical connection;

molding said die by compound from a first surface of said leadframe;

backside etching said leadframe from a second surface of said leadframe to expose a lower surface of said compound, thereby separating said bonding pads and said die pads; and

separating each individual package by cutting said leadframe and said compound.

2. The method of claim 1, furthering comprising etching said leadframe to form an inward indentation portions in said leadframe, thereby forming said bonding pads and die pads.

3. The method of claim 1, furthering comprising punching said leadframe to form an inward indentation portions in said leadframe, thereby forming said bonding pads and die pads.

4. The method of claim 1, wherein said die is attached by adhesive material.

5. The method of claim 4, wherein said adhesive material includes epoxy.

6. The method of claim 1, wherein said bonding wires includes gold.

7. A method of forming a HSQFN (High Stand-off Quad Flat Non-leaded) package, comprising:
performing two stages of etching to etch a leadfram from a different surface, wherein further comprising performing die bonding, wire bonding and molding between said two stages of etching;
wherein a first etching of said two stages of etching comprising forming an inward indentation portion of said leadframe from a first side of said leadframe to define die pads and bonding pads; and

wherein a second etching of said two stages of etching comprising separating said die pads and bonding pads by etching from a second side of said leadframe.

8. The method of claim 7, furthering comprising separating each individual package by cutting said leadframe and compound formed by said molding.

9. A HSQFN (High Stand-off Quad Flat Non-leaded) package, comprising:

a leadframe having a die pad and bonding pads, wherein said die pad is designed to carry a die adhesived thereon by adhesive material, wherein said die pad and bonding pads are separated;

a plurality of bonding wires connected between said bonding pads and said die for electrical communication; and

molding compound encompasses said die, said bonding wires and a first surface of said lead frame, leaving the terminal of said bonding pads and the lower surface of said die pad exposed out of said compound for providing excellent thermal dissipation from said packages, wherein said exposed bonding pads is used for communication terminal for said package.

10. The HSQFN package of claim 9, wherein said die is attached by adhesive material.

11. The HSQFN package of claim 10, wherein said adhesive material includes epoxy.

12. The HSQFN package of claim 9, wherein said bonding wires includes gold.

2025 RELEASE UNDER E.O. 14176